

ON AUSTRALIAN DERMESTIDAE. PART V.

NOTES AND THE DESCRIPTION OF FOUR NEW SPECIES.

By J. W. T. ARMSTRONG.

(One Text-figure.)

[Read 30th March, 1949.]

INTRODUCTION.

This paper contains the description of four new species of Australian Dermestidae that have come under notice since Part IV* of this series was published.

Anthrenocerus stigmaphilus n. sp. is a true inquiline, both the larvae and newly emerged adults being found in the nests of the ant, *Stigmacros foreli*, which treats them with complete toleration. Notes are also given on some previously described species.

TROGODERMA SILVICOLUM D. SP.

Types: Holotype 6 exs. on card in coll. Armstrong, paratypes in British, Australian and South Australian Museums and the collections of F. E. Wilson and H. J. Davidson.

Type locality: Acacia Plateau, N.S.W.

DESCRIPTION.

Ovate, black, nitid, clothed with moderately short semi-depressed black setae, antennae, mouth parts and tarsi fuscous.

Pronotum: Widest at base, sides evenly rounded to apex, medial lobe rather wide with apex lightly emarginate, posterior angles acute, disc finely and not closely punctate, with a wide, well-marked oblique depression on each side before the base.

Elytra: Three-quarters as wide as long, base as wide as pronotum, sides expanding to shoulders, then lightly so for about half length, thence evenly rounded to apex, more closely and strongly punctate than pronotum.

Antennae: ♂ long, extending well beyond base of presternum, first two joints rather large moniliform, the remaining nine forming a long, loose, narrow club, of which the first four become progressively larger, the next four are approximately similar and the eleventh is ovate; ♀ club four or five jointed, the seventh is somewhat wider than the preceding one.

Size: 2.5-2 mm. × 1.7-1.3 mm.

Discussion: Fifteen examples, taken on a flowering creeper in the edge of the rain-forest in December, resemble the black variety of *T. reitteri* Blackb., but that species has only a three-jointed antennal club. They are more compact and shining than *T. maurulum* Blackb. in which the club is eight-jointed.

Distribution: Acacia Plateau and Acacia Creek, N.S.W. (Armstrong).

TROGODERMA INCONSPICUUM ARMST.

Armstrong, J. W. T., 1942.—PROC. LINN. SOC. N.S.W., lxxvii, 326.

Type: In South Australian Museum.

Type locality: Swan River, W.A.

Discussion: Eight specimens in the C.S.I.R. Collection evidently belong to this species. Three have the elytra red except round the scutellum. In both sexes the antennal club is three-segmented, but that of the ♂ is much stouter.

Distribution: Swan R. (Lea), Wurarga (A. Goerling), W.A.

* These PROCEEDINGS, lxx, 1945, 47-52.

TROGODERMA LONGIUS Blackb.

Blackburn, T., 1903.—*Trans. Roy. Soc. S.A.*, xxvii, 163.

Type: In British Museum.

Type locality: ? Glenelg R., Vic.

Discussion: Four specimens from Acacia Plateau were at first thought to be a new species, but they agree with the description of this species, except that the antimedial elytral fascia is absent and is represented only by a sparse pale pubescence. It is therefore considered better to treat them as a local variety, unless comparison with a typical specimen, which is not now available to me, should reveal other differences.

Distribution: Glenelg R., Vic., Tas., Acacia Plateau, N.S.W. (Armstrong and Davidson).

TROGODERMA CARTERI Armst.

Armstrong, J. W. T., 1942.—*Proc. Linn. Soc. N.S.W.*, lxvii, 328.

Types: In the author's collection.

Type locality: Bogan R., N.S.W.

DESCRIPTION OF ♂.

The ♂ differs from the ♀ as follows:

Smaller.

Elytra: More or less darkly castaneous.

Antennae: First two joints rather stout, club nine-segmented and stoutly pectinate.

Size: 2.75 × 1.25 mm.

Discussion: The form of the ♂ antennae places this species close to *T. macleayi* Blackb., but it is narrower, less shining, and the third antennal segment distinctly forms part of the club, and is not minute as in Blackburn's species. Larvae were found in the oothecae of mantids, the adults emerging at the end of August. Larvae were also found in spiders' webs, under loose bark and infesting stored insects. They are remarkable for the very strongly clubbed black hairs on their dorsal surface. They have short hastisetae, rather evenly distributed, but not numerous, barbed setae at sides, but no long caudal setae. Specimens have been submitted to Dr. Bryant E. Rees for description. From late in June, the adult insect is usually found fully developed resting in the exuvia. When disturbed they are quite lively.

Distribution: Only known from type locality.

TROGODERMA CALLUBRIENSE (Armst.).

Armstrong, J. W. T., 1945.—*Proc. Linn. Soc. N.S.W.*, lxx, 48 (*Psacus*).

Type: In the author's coll.

Type locality: Bogan R., N.S.W.

Synonymy: *Psacus callubriensis* Armstrong, 1945, loc. cit. (n. syn.).

Discussion: Hinton (Mon. Beetles Assoc. Stored Products, 1945, 375) placed the genus *Psacus* as a synonym of *Trogoderma*. My species therefore also becomes a *Trogoderma*.

MEGATOMA FOVEOLATUS Lepesme.

Lepesme, P., 1941.—*Bull. Soc. ent. Fr.*, 142.

Type: Unique, ? either in coll. Lepesme or Paris Museum.

Type locality: Australia.

Discussion: This species is unknown to me in nature. The description, however, is very suggestive of a ♀ of *Trogoderma attagenoides* (Pasc.) = *Psacus attagenoides* Pasc., though my specimen of this has not the pronotal depressions mentioned. These, however, may have been caused by damage to the specimen when immature.

Lepesme separates the two Australian species attributed to *Megatoma* as follows:

"Corps court et large, noir; une seule fascie transversale, étroite, subdroite, sur les élytres *tenuefasciata* Rtt."

“Corps allongé, brun rouge; trois fascies transversales, étroites, sinueuses, peu marquées, sur les élytres *foveolatus*, n. sp.”

Some specimens of *T. attagenoides* are brown in colour.

ADELAIDIA RIGUA Blackb.

Blackburn, T., 1891.—*Trans. Roy. Soc. S. Aust.*, xiv, 130.

Type: In British Museum.

Type locality: South Australia.

Discussion: A specimen taken in the Bogan River district is evidently the male of this species. It is 3.25 mm. long and the combined length of the three segments of the antennal club exceeds that of the remainder, each segment being more than twice as long as wide, with the terminal the longest. This is the only specimen known to me in Australian collections.

Distribution: S.A., Bogan R., N.S.W.

ANTHRENOCERUS ARROWI, n. sp.

Types: Holotype in the author's collection; paratypes in the British Museum, etc.

Type locality: Bogan R., N.S.W.

Synonyms: *Anthrenocerus bicolor* Armstrong nec. Arrow, Armstrong, 1943.—*Proc. Linn. Soc. N.S.W.*, lxxviii, 61 (n. syn.).

DESCRIPTION.

Ovate, sub-convex, nigro-piceus, elytra dark brown, antennae and legs brownish, clothed with not very short dark and light depressed setae, the latter white interspersed with stramineous and disposed much as in *A. australis* (Hope), in four irregular elytral fasciae and two apical spots, and at sides, front and on basal lobe of pronotum; clothing of ventral surface short, ashy white and very fine. (Evans, “Insect Pests and their Control”, Dept. Agr. Tas., 1943, 154, gives a good figure of Hope's species.)

Pronotum: Transverse, widest at base, sides evenly rounded to apex, deeply, closely and moderately punctate.

Elytra: As wide as prothorax at base, expanding to shoulders almost in the same line as sides of pronotum, thence gradually narrowing for approximately half length, then evenly rounded to apex, coarsely and closely punctate.

Size: 2.5–1.9 mm. × 1.6–1 mm.

Discussion: Arrow recently pointed out my mistake in identifying this species as his *A. bicolor*, and kindly sent a cotype of the latter which comes very near some varieties of the species, regarded by Blackburn and myself as *A. variabilis* Reitt., but the pronotum is black. The species here described differs from it in having the elytra darker and not so uniformly brown, the clothing longer and coarser and the light setae of two colours. The brown elytra separate it from *A. australis* (Hope), *signatus* Armst., and *blackburni* Armst. There are forty-one specimens under examination, and numerous others have been identified by me as *A. bicolor* Arrow in the various museum and private collections of this country. It is hoped these identifications will be altered. The species is tabulated under Arrow's name (*Proc. Linn. Soc. N.S.W.*, 1943, 58). Specimens in the British Museum from Townsville tend to be somewhat more robust and those from Western Australia have finer clothing. The species is named in gratitude for the help and co-operation received from Mr. G. J. Arrow of the British Museum.

Distribution: Bogan R., N.S.W. (Armstrong), Townsville, Q. (F. P. Dodd), Yallingup, southern W. Aust. (R. E. Turner). Widespread in southern and eastern Australia.

ANTHRENOCERUS BLACKBURNI Armst.

Armstrong, J. W. T., 1943.—*Proc. Linn. Soc. N.S.W.*, lxxviii, 60, fig. 4.

Type: In South Australian Museum.

Type locality: ? Victoria.

Discussion: In view of the detailed description of *A. australis* (Hope) given by Hinton (*Mon. Beetles Assoc. Stored Products*, 1945, 369), which is presumably based on material collected in England, it seems likely that this form represents only an extreme

variety of that species. *A. arrowi*, described above, would perhaps also be better treated as a sub-species of the same species. It is thought possible that a study of the larvae of these and nearly related species would throw considerable light on their relationship.

Distribution: Vic.; Bombala, Illawarra, Acacia Plateau, N.S.W.

ANTHRENOCERUS STIGMACROPHILUS, n. sp. Text-fig. 1.

Types: Holotype in the author's collection, paratypes in the British, Australian, National and South Australian Museums.

Type locality: N.S.W., Bogan R. (J. Armstrong), in nests of a small ant (*Stigmacros foreli* Viehm.) during November.

DESCRIPTION.

Ovate, black, nitid, clothed with semi-erect black setae sparsely and obscurely patterned with white, the white setae form two obscure fasciae on the elytra, one anti-medial and one post-medial, and are also present at base and apex, and are present on the pronotum, being almost confined to the basal lobe but sometimes faintly visible elsewhere, ventral clothing dark, antennae and legs red.

Pronotum: Transverse, sides narrowing gradually, then more suddenly rounded to apex, basal lobe wide, base with a depressed line in front of it, sides narrowly explanate, disc strongly convex, finely and closely punctate.

Elytra: As wide as prothorax at base, expanding to shoulders, thence slightly narrowing for approximately half length, then evenly rounded to apex, more coarsely and closely punctate.

Size: 3-2.4 mm. \times 1.9-1.4 mm.

Discussion: Fifteen specimens were taken in the galleries of two nests of the ant *Stigmacros foreli* Viehm. (thanks are due to the Rev. J. McAreavey for the identification) together with a number of larvae and pupae. The larvae are very different from those of *A. australis* (Hope) as figured by Evans (loc. cit.). The species would fall beside *A. australis* (Hope) in my table (loc. cit.), but the pronotum is different and the pattern much fainter. At first glance it appears close to *A. niger* Armst., but in that species the



Text-figure 1.—*Anthrenocerus stigmacophilus*, n. sp. Larva.

pronotum is not margined, and, in the one specimen so far taken, the eyes are golden. The larvae (exuvia Text-fig. 1) are rather dark stramineous and have very short bluntly clubbed hairs on the dorsal surface, a lateral fringe of pointed barbed setae, but no hastisetae. Specimens have been submitted to Dr. Rees for description. There can be no doubt that the species is truly myrmecophilous as the larvae can be found in the nests of its host all the year round, and the beetles also remain there until the weather is suitable for them to emerge.

Distribution: In addition to the type locality, there are larval specimens in the National Museum, Washington, from Hornsby, N.S.W., also from an ants' nest, that appear close to this species, but Dr. W. H. Anderson believes that they represent a closely allied species.

ANTHRENOUS VORAX Waterh.

Waterhouse, C. O., 1883.—*Ann. Mag. Nat. Hist.* (5), xi, 61; Hinton, H. E., 1945.—*Mon. Beetles Assoc. Stored Products*, I, 334.

Locality record: N.S.W., Trangie (J. Armstrong).

Note: Advanced larvae from old saddlery in saddler's shop taken 30th Sept., 1948. Adults emerged about 1st Dec.

ORPHINUM NEALÉNSIS (Blackb.)

Blackburn, T., 1903.—*Trans. Roy. Soc. S. Aust.*, xxvii, 170.

(*Crypterhopalum*.)

Armstrong, J. W. T., 1943.—*Proc. Linn. Soc. N.S.W.*, lxxviii, 63.

Type: In British Museum.

Type locality: Oodnadatta, S.A.

Synonymy: *Crypterhopalum nealense* Blackb., loc. cit.

Distribution: Oodnadatta, S.A., Bogan R., N.S.W. (Armstrong), 60 specimens on myall (*Acacia pedula*), February, 1945.

NEOANTHRENUS MACQUEENI, n. sp.

Types: Holotype in the author's coll., paratypes in British and Australian Museums.

Type locality: Milmeran, southern Queensland (J. Macqueen).

DESCRIPTION.

Elongate-ovate, black, legs and antennae ferruginous, densely clothed with scales, mostly ashy-yellow, but some brown forming a pattern much as in *N. parallelus* Armst. (*Proc. Linn. Soc. N.S.W.*, 1941, 390, fig. 2), those on the ventral surface ashen, closely and evenly punctate.

Pronotum: Transverse, sub-rectangular, convex, transversely depressed just in front of base, sides marginate, straight and gradually converging for about three-quarters of length, then rounded to anterior angles, these obtuse, posterior angles slightly acute, base strongly lobed.

Elytra: A little wider than prothorax, one and a quarter times as long as wide, shoulders rounded, sides slightly curved almost parallel for approximately two-thirds length then evenly rounded to apex.

Size: 2-1.8 mm. × 1-0.9 mm.

Discussion: Six specimens, named after their captor, are close to *N. parallelus* Armst., but that is a proportionately longer species and the sides of its prothorax are slightly curved in the first two-thirds. *N. ocellifer* Blackb. has the sides of the prothorax slightly incurved, and is a larger species, differently coloured. In the descriptions of *N. parallelus* and *N. niveosparsus* (loc. cit.) the term "emarginate" was applied to the sides of the pronotum, whereas "marginate" was intended.

Distribution: Only known from type locality.

NEOANTHRENUS PARALLELUS ARMST.

Type: In the author's coll.

Type locality: Lane Cove, N.S.W.

Distribution: Lane Cove, N.S.W., National Park, Q. (Hacker, Dec., 1919), eight examples in Queensland Museum.

CORRIGENDUM.

Proc. Linn. Soc. N.S.W., lxxii, 1947, 297, lines 26 and 38:

For "Xylabosca" read "Xylobosca".